Exhibit 3

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

In re Flint Water Cases

Civil Action No. 5:16-cv-10444-JEL-MKM (consolidated)

Hon. Judith E. Levy Mag. Mona K. Majzoub

Elnora Carthan, et al. v. Governor Rick Snyder, et al.

Civil Action No. 5:16-cv-10444-JEL-MKM

REPLY REPORT OF DARYN REICHERTER, M.D.

My name is Daryn Reicherter, M.D. I submit this Rebuttal Report in response to the Expert Reports of Dr. Roger K. Pitman and Dr. David W. Thompson.

- 1. Based on the reports, it seems that Drs. Pitman and Thompson lack both an understanding of the scientific study of community trauma, as well as my opinions regarding the community trauma suffered by the residents of Flint as a result of the crisis of the City's poisoned water supply and lack of access to safe drinking water.
- 2. That said, it is significant to note that they both acknowledge that the residents of Flint suffered a traumatic stress as a result of the Flint Water Crisis. For example, Dr. Pitman says: "(mis)perception or belief that one and one's family have been exposed to a dangerous toxic contaminant in the water, which might cause them to suffer medical problems . . . could conceivably belong to the class of life events capable of precipitating MDD in vulnerable individuals" Pitman Report at p.12. Dr. Thompson similarly acknowledges that ". . . the Flint water crisis caused wide distress affecting many individuals." Thompson Report at 5. Clearly, they are both aware that a stressor of the magnitude of the Flint Water Crisis is a risk factor for the development of negative mental health outcomes for the affected population.

3. Below, I address, and clarify a number of misstatements and flawed interpretations/analysis contained in their reports:

A. Dr. Pitman's Discussion of Causality rather than Risk Factor in regard to PTSD and Major Depressive Disorder in Individual Flint Residents is Misleading

- 4. Dr. Pitman fails to appreciate the distinctions between assessing a community in crisis and diagnosing an individual in private treatment practice.
- 5. Dr. Pitman opines that the Flint Water Crisis could not have caused PTSD or Major Depressive Disorder in any one individual Flint resident, absent any support for these conclusions aside from his recitation of some inclusion criteria from the DSM-5 TR, which define the terms and disorders. These conclusions have no bearing on my opinions.
- 6. DSM-5TR describes the constellation of symptoms which define the phenomenology of disorder states in individuals. It also describes risks factors associated with the development of many different diagnoses.

 Trauma and stress are cited repeatedly as risk factors for the development of unwanted mental health conditions throughout the DSM-5 TR (and many other textbooks published by the American Psychiatric Association).

Exposure on a population level is key to understanding how a stressor impacts a community rather than a single individual.

- 7. Trauma and stress are risk factors for a great many individual diagnoses throughout the DSM-5 TR, which is why traumatic experience and stressors so detrimental to population health. For instance, in the section describing PTSD risk factors under the section noted "Pretrauamtic Factors" the DSM-5 TR states: "...risk factors include lower socioeconomic status, lower education, exposure prior to trauma (especially during childhood), childhood adversity (eg. economic deprivation, family dysfunction parental separation, or death), lower intelligence, ethnic discrimination and racism..." (DSM-5 TR pg. 310). Moreover, "Posttraumatic Factors" are defined in the DSM-5 TR to "...include subsequent exposure to repeated upsetting reminders, subsequent adverse life events, and financial or other trauma-related losses."
- 8. "Exposure to racial and ethnic discrimination has been associated with a more chronic course among African American and Latinx adults."

 (DSM-5 TR pg. 310) In these passages the DSM-5 TR is making clear that additional hits of trauma are impactful on individuals. And the DSM is also making clear how these risk factors will ripple through a population all exposed to traumatic events.

- 9. Similar warnings about trauma as risk factor for many other DSM diagnoses appear in throughout the DSM-5 TR. Stress and Trauma are acknowledged as a risk factor for "Depressive Disorders," "Anxiety Disorders," "Dissociative Disorders," "Somatic Symptom and Related Disorders," "Sleep-Wake Disorders," "Personality Disorders," among others.
- 10. Dr. Pittman acknowledges that the Flint Water Crisis could "cause" a major DSM 5 TR diagnosis called "Adjustment disorder." This is one diagnostic category that acknowledged stress/trauma is the specific and direct cause of the disorder state rather than a risk factor for its development.
- 11. The difference between a "risk factor" and "a cause" is a matter of semantics when discussing population mental health wherein a significant portion of the population has all been exposed to the traumatic stressor and symptom suffering and impaired are observed in that population.
- 12. I opine that the Flint Water Crisis was a traumatic stressor that threatened the safety of the community as a whole and thus enhanced the risk for individuals within that community to experience negative mental health outcomes. These opinions are entirely consistent with the studies I have reviewed and discussed in detail in prior reports involving the residents of Flint.
- 13. Dr. Pitman's discussion of individual assessments for these conditions is entirely missing the point of my discussion of community trauma, instead

suggesting that I am seeking to diagnose specific individuals in Flint. I am not.

B. The Flint Water Crisis Substantially Harmed the Flint Community as a Whole

- 14. Dr. Pitman misses entirely the point of my opinions regarding community trauma when he opines that the "contention that lead in Flint River water substantially harmed children or adults is dubious." Pitman Report at 29.
- 15. To the extent Dr. Pitman is referring to "harm" beyond mental health and trauma issues, he is neither qualified, nor offers any support for his opinions regarding medical conditions attributed to lead exposure. With respect to the "harm" to the community, he is incorrect. Scientific research confirms that Flint has suffered community-wide trauma as a result of the Water Crisis.
- 16. Scientific research confirms not only that the Flint Water Crisis was a risk factor for negative mental health outcomes, but also that residents have indeed experienced negative mental health outcomes as a result of the toxic water contamination, including "extreme emotional distress," posttraumatic stress disorder, anxiety, depression, and diminished ability to cope with normal levels of stress (Cuthbertson et al., 2016; Kruger, Cupal, Franzen, Kodjebacheva, Bailey, Key, & Kaufman, 2017; CASPER).

- 17. Indeed, despite his opinion that the Flint Water Crisis did not substantially harm Flint Residents, Dr. Pitman acknowledges that the Flint Water Crisis may have caused Flint residents to suffer negative mental health outcomes, including adjustment disorder, stress, worry, discomfort, anxiety, loss of trust, anger, and/or dejection. Pitman Report at 29.
- 18. Moreover, Community Trauma represents not only a rise in the prevalence of mental health disorders in a community it is the pervasive and collective experience of trauma throughout the group. It is the collective sense of instability resulting from a shared stressor. In addition to higher prevalence of specific mental disorders, the community shares a sub-clinical experience of trauma related psychological disturbance of poor psychological outcomes.
- 19. Research also confirms that the Flint community shares a sub-clinical experience of trauma related psychological disturbance of poor psychological outcomes. Stressed and Vulnerable communities are at higher risk of developing unwanted mental health outcomes from new stressors as compared to affluent and well-resourced communities.
- 20. Downplaying the substantial Community Trauma suffered in Flint, Dr. Pitman opines that:
- "[T]he F[lint] W[ater] C[risis] is not in the same league as other community traumatic events Dr. Reicherter compared the FWC to in his declaration, e.g., genocide and attempted genocide in Cambodia

and northern Iraq, child soldiering, rape, and sexual slavery. All these pose far, far higher threat, and they involve sinister intent as opposed to mismanagement."

Pitman Report at 8.

- 21. My intent is not to compare or rank the different possible traumatic experiences. My CV includes experiences in many contexts of disaster, community level traumatic stress, and war conflict in which I have used my expertise.
- 22. Traumatic stressors are not ranked by "leagues." Although stressor severity may differ from the events described above, the Flint Water Crisis was a traumatic stressor that substantially caused harm and continues to harm the Flint community. Traumatic stress has greater impact on human health when the stressor has great intensity, great frequency, increased time duration, and a lack of safety (all factors present for many flint citizens during the Flint Water Crisis).
- 23. Moreover, Plaintiffs allege that the water crisis was a result of intentional conduct, not simple "mismanagement." Indeed, it is the very intentionality, and lack of candor on the part of those responsible, including VNA, that contributes to the harm. *See* Class Complaint.
- 24. Drs. Pitman and Thompson both attempt to miscast Flint's community-wide trauma in a positive light, opining that the Flint Water

Crisis was a "rallying point" or "rallying cry" for the community and that, as a result, a large amount of money and resources flowed into Flint. *See*Pitman Report at 9, Thompson Report at 7.

- 25. While suggesting that this crisis is somehow a "positive experience" neither Drs. Pitman or Thompson provide any scientific support for these conclusions and again they have entirely missed the mark. Resiliency does not dimmish trauma. A traumatic stressor does not cease to be traumatic simply because *some* efforts to respond to the crisis after the fact may have occurred. It is uncommon for communities to celebrate community trauma because they receive some mitigation for their trauma.
- 26. Dr. Thompson opines that community concerns about water quality arose prior to his client's involvement in February of 2015. Once again, Dr. Thompson is misrepresenting the effects of trauma on communities. Trauma is compounding. As explained in my report, Flint was already a distressed community prior to the water crisis. Every event that happened thereafter, including events that occurred after February of 2015, only served to move Flint from a distressed community to a traumatized community. The notion that Flint has multiple other factors contributing to community trauma is not a mitigating factor. Just the opposite. Distressed communities are at higher risk for realization of risks associated with traumatic stress. The more

stressors, socioeconomic stress, violence, etc., the more susceptible the community is to any new major stressor (like The Flint Water Crisis). The Water Crisis became a major risk factor, compiled with many other risk factors, and acted in synergy to push unwanted mental health outcomes forward.

C. There is No Evidence that the Community Trauma Suffered in Flint Was the Result of the Media or other "Factions"

- 27. Dr. Pitman contends that the Flint Water Crisis was "grossly exaggerated" in the media and seems to imply that it was the media (along with "certain factions" including plaintiffs' attorneys and environmental and anti-racism activists) who caused Flint to suffer community-wide trauma.
- 28. There is no evidence in any of the scientific studies conducted related to the Flint Water Crisis to date to support the conclusion that anything other than lead-contaminated water caused the community-wide trauma suffered in Flint. Indeed, the fact that it was as distressed community prior to the crises only enhances the capacity for trauma.

D. My Interviews with Flint Community Leaders Were Conducted Using Unbiased Interview Techniques

29. Dr. Pitman suggests that my interviews with Flint community leaders are unreliable because I employed a "trauma-informed interview technique." Dr. Pitman is incorrect.

- 30. In my CV and in my deposition there is mention of my work with the development of "Trauma-Informed Investigations." This work is unrelated to my comments and knowledge on Flint and unrelated to information gleaned from open-ended conversations with community leaders. The work noted in my CV relating to "trauma-informed investigating" is in the context of training and guidance for international investigators (lawyers) who work with survivors of war crimes. I am not an attorney and I am not investigating a war crime in the context of my declaration on Flint.
- 31. My interviews with community leaders from Flint were open ended, allowing them to relate to me their experience and observations of the community that they represent.
- 32. The responses obtained from Dr. Hanna-Attisha and Rev Monica
 Villarreal and their colleagues were their own authentic responses to simple
 and open ended questions about the health of their community.

E. My Report References Reliable Scientific Studies Evaluating Mental Health Outcomes in Flint

33. Drs. Pitman and Thompson contend that the numerous scientific studies referenced in my report, including the CDC's CASPER, are unuseful because they rely on "cross-sectional, self-reported data," obtained by lay persons who underwent training, "fail to take into account the distinction between perception and reality," and have allegedly low response rates.

- 34. Pittman and Thompson's emphasis on the studies limitations are misinformed. Every study has limitations, and the fact that a study is not "ideal" does not make it invalid. While studies capturing objectively 100% of a massive population's responses may be ideal, they are also infeasible to conduct and unavailable in almost all cases. Such studies are rarely conducted in the field of population mental health absent immense funding and impracticable human resources for research. These opinions further underscore Drs. Pitman and Thompson's lack of understanding, or experience of the concept of community trauma, or assessing it. Population scientists must use the best information available.
- 35. Self-reported data is well-founded, practical, and customary in large population studies.
- 36. Drs. Pitman and Thompson do not appear to understand the nature of a CASPER, and the data it is intended to garner. The CDC's CASPER was a major tool for collecting Flint's mental health data. From the CDC's website: "CASPER is designed to provide public health leaders and emergency managers information about a community so they can make informed decisions. CASPER is quick, relatively inexpensive, flexible, and uses a simple reporting format. It uses a valid sampling methodology to collect information at the household level and can be used in disaster or non-

disaster settings." (CDC Website). Follow up studies and subsequent research support the initial findings of the CASPER studies.

- 37. Challenging my report on the basis that it relies upon self-reporting is ill informed. This attack on a CDC standard tool suggests a lack of understanding about working within population mental health studies. Dr. Pitman and Dr. Thompson either fail to acknowledge, are unaware, or lack the experience and expertise to know that this is a standard method of data collection for large scale, population studies.
- 38. World experts familiar with massive mental health trauma are aware of the utility of self-reporting tools like CASPER. The United States Department of Health and Human Services' CDC employs it as their excepted, standard tool for assessing mental health reaction in disaster settings.
- 39. The Flint Community Resilience Group, Michigan Department of Health and Human Services, Genesee County Health Department, Genesee Health System, and the University of Michigan–Flint, specifically asked for a CASPER to evaluate mental health during this crisis. These local public health stakeholders were particularly concerned about poor mental health outcomes and their repercussions for the community amid a biological crisis

Available at https://www.cdc.gov/nceh/casper/default.htm#:~:text=The%20 Community%20Assessment%20for%20Public,

^{%2}C%20relatively%20inexpensive%2C%20and%20flexible.

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(water contamination). Public health experts use these studies because they are very informative and demonstrate the magnitude of the mental health effects of the Flint Water Crisis and they are helpful in determining best

40. The CASPER performed in Flint was unequivocally demonstrative of

psychological harm in the community – that is why it is such a powerful tool

in this matter.

41. An idealized (perfect) study which could utilize trained mental health

professionals to perform DSM 5 TR-style interviews for every member of a

community and compare them to a control group of equal number is

unfeasible. Such a study would require unrealistic person-power,

unattainable financial resources, and impractical time requirements. This is

why population scientists use community based assessments like CASPER

and the studies cited in my report.

approaches for public health interventions.

I declare under penalty of perjury that the forgoing is true and correct to the

best of my knowledge and recollection.

Daryn Reicherter, M.D.

March 3, 2023

Date